HEALTHCARE COST AND UTILIZATION PROJECT — HCUP
A FEDERAL-STATE-INDUSTRY PARTNERSHIP IN HEALTH DATA
Sponsored by the Agency for Healthcare Research and Quality

INTRODUCTION TO

THE HCUP KIDS' INPATIENT DATABASE (KID),

2003

These pages provide only an introduction to the KID package.

Full documentation is provided on the KID Documentation CD-ROM.

For documentation updates and changes, be sure to visit: http://www.hcup-us.ahrq.gov.

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Table of Contents

Index of Tables

HCUP KIDS' INPATIENT DATABASE (KID)
SUMMARY OF DATA USE LIMITATIONS

******* REMINDER *******

All users of the KID must sign a data use agreement and send a copy to AHRQ. †

Authorized users of HCUP data agree to the following limitations: ‡

- Will not use the data for any purpose other than research or aggregate statistical reporting.
- Will not re-release any data to unauthorized users.
- Will not identify or attempt to identify any individual.
- Will not link HCUP data to data from another source that identifies individuals.
- Will not report information that could identify individual establishments (e.g., hospitals).
- Will not use the data concerning individual establishments for commercial or competitive purposes involving those establishments.
- Will not use the data to determine rights, benefits, or privileges of individual establishments.
- Will not identify or attempt to identify any establishment when its identity has been concealed on the database.
- Will not contact establishments included in the data.
- Will not attribute to data contributors any conclusions drawn from the data.
- Will not use data elements from the proprietary severity adjustment software packages (3M APR-DRGs, HSS APS-DRGs, and Medstat Disease Staging) for any commercial purpose or to disassemble, decompile, or otherwise reverse engineer the proprietary software.
- Must acknowledge the "Healthcare Cost and Utilization Project, (HCUP)", as described in the data use agreement, in reports.

Any violation of the limitations in the data use agreement is punishable under Federal law by a fine of up to $10,000 and up to 5 years in prison. Violations may also be subject to penalties under State statutes.

† A copy of the Data Use Agreement for the Kids' Inpatient Database is available on the HCUP User Support Website: http://www.hcup-us.ahrq.gov/team/KIDDUA.jsp.
‡ Specific provisions are detailed in the Data Use Agreement for Kids' Inpatient Database.

HCUP CONTACT INFORMATION

The KID Data Use Agreement is available on the HCUP User Support Website:

http://www.hcup-us.ahrq.gov

Please submit signed data use agreements to HCUP at:

Agency for Healthcare Research and Quality
Healthcare Cost and Utilization Project (HCUP)
540 Gaither Road, 5th Floor
Rockville, Maryland 20850

Phone: (301) 427-1410
Fax: (301) 427-1430
Website: http://www.ahrq.gov/data/hcup/

For technical assistance,

Visit the AHRQ-sponsored HCUP User Support (HCUP-US) Website at

http://www.hcup-us.ahrq.gov

Or send an E-mail to HCUP User Support at

hcup@ahrq.gov

Or contact the HCUP Central Distributor at

HCUP Central Distributor
Phone: (866) 556-4287 (toll-free between the hours of 9 a.m. and 5 p.m. (ET). If the HCUP Central Distributor is not immediately available, please leave a message on the voice mail, and your call will be returned within one business day.)

Fax: (866) 792-5313
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WHAT'S NEW IN THE 2003 KIDS' INPATIENT DATABASE (KID)?

- Eleven States have joined the KID in 2003: Illinois, Indiana, Michigan, Minnesota, Nebraska, New Hampshire, Nevada, Ohio, Rhode Island, South Dakota, Vermont. Data from Maine and Pennsylvania were not available for inclusion in the 2003 KID.
- A new companion discharge-level KID file provides information on four different sets of disease severity measures:
  - All Patient Refined Diagnosis Related Groups (APR-DRGs) developed by 3M Health Information Systems.
  - All-Payer Severity-adjusted Diagnosis Related Groups (APS-DRGs) developed by HSS, Inc.
  - Disease Staging developed by Thomson Medstat.
  - AHRQ comorbidity measures developed by AHRQ.
- The data elements MDNUM1_R and MDNUM2_R (reidentified physician numbers) replace previous synthetic physician number data elements.
- The data element HOSPSTCO (the hospital's county) is no longer present on the Core file but remains on the hospital file.
- Weighted summary statistics have been added to the documentation to aid users in checking their weighting procedures.
- We provide a brief section in this Overview on "How to Use the KID."
- New data elements include the following:
  - ASOURCEUB92 indicates the source of admission and uses the same coding as the source of admission data element on the UB-92 claim form. ASOURCEUB92 has more detailed categories for routine admissions and transfers from other health facilities than the HCUP data element ASOURCE.
  - ELECTIVE identifies elective admissions.
  - ECODEn is an array of the external cause of injury codes (i.e., "E codes"). Prior to 2003, E codes are included in the diagnosis array (DXn). Beginning in 2003, any separately reported E codes and any E codes encountered in the diagnosis array are placed in a separate array specific to E codes (ECODEn). NECODES indicates the total number of E codes (valid and invalid) that are coded on the original discharge record. The array E_CCSn contains the Clinical Classifications Software (CCS) category for the corresponding E code in the ECODEn array. The CCS consists of 21 categories of E codes based on a classification system developed by the Centers for Disease Control.
  - PT_UR_CAT4 is an urban-rural measure that characterizes the patient's county of residence. The measure is a consolidated version of the Urban Influence Codes (UIC) developed by the U.S. Department of Agriculture, which expands upon the Metropolitan Statistical Area (MSA) classification as applied to the 2000 Census. In this classification, urban counties are distinguished by the population of their largest metropolitan area. Rural counties are

WHAT'S NEW IN THE 2003 KIDS' INPATIENT DATABASE (KID)?

differentiated by the size of the largest metropolitan area they are adjacent to and the size of their largest community.

- ZIPINC_QRTL is a categorical variable indicating the quartile that contains the median household income of the patient's ZIP Code of residence. For 2003, the median income quartiles are defined as: $1 - $35,999; $36,000 - $44,999; $45,000 - $59,999; and $60,000 or more.

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The Agency for Healthcare Research and Quality and the staff of the Healthcare Cost and Utilization Project (HCUP) thank you for purchasing the HCUP Kids' Inpatient Database (KID).

HCUP Kids' Inpatient Database (KID)

ABSTRACT

The Kids' Inpatient Database (KID) is part of the Healthcare Cost and Utilization Project (HCUP), sponsored by the Agency for Healthcare Research and Quality (AHRQ), formerly the Agency for Health Care Policy and Research.

The KID is the only dataset on hospital use, outcomes, and charges designed to study children's use of hospital services in the United States. The KID is a sample of discharges from all community, non-rehabilitation hospitals in states participating in HCUP. The target universe includes pediatric discharges from community, non-rehabilitation hospitals in the United States. Pediatric discharges are defined as all discharges where the patient was age 20 or less at admission.

The KID contains charge information on all patients, regardless of payer, including persons covered by private insurance, Medicaid, Medicare, and the uninsured. The KID's large sample size enables analyses of rare conditions, such as congenital anomalies and uncommon treatments, such as organ transplantation. It can be used to study a wide range of topics including the economic burden of pediatric conditions, access to services, quality of care and patient safety, and the impact of health policy changes.

Inpatient stay records in the KID include clinical and resource use information typically available from discharge abstracts. Discharge weights are provided for calculating national estimates. The KID can be linked to hospital-level data from the American Hospital Association's Annual Survey of Hospitals and county-level data from the Bureau of Health Professions' Area Resource File, except in those states that do not allow the release of hospital identifiers.

The 2003 KID differs from the 2000 KID release in that 11 more states are included, for a total of 36. In addition, some data elements were dropped, some were added, and the values of some data elements were changed.

Access to the KID is open to users who sign data use agreements. Uses are limited to research and aggregate statistical reporting.

For more information on the KID, visit the AHRQ-sponsored HCUP User Support (HCUP-US) Website at http://www.hcup-us.ahrq.gov or see the detailed documentation on the documentation CD that accompanies the data.

INTRODUCTION TO THE HCUP KIDS' INPATIENT DATABASE (KID)

OVERVIEW OF KID DATA

The Healthcare Cost and Utilization Project (HCUP) Kids' Inpatient Database (KID) was developed to enable analyses of hospital utilization by children across the United States. The target universe includes pediatric discharges from community, non-rehabilitation hospitals in the United States in 2003. Community hospitals, as defined by the American Hospital Association (AHA), include "all nonfederal, short-term, general and other specialty hospitals, excluding hospital units of institutions." Included among community hospitals are academic medical centers and specialty hospitals such as obstetrics-gynecology, ear-nose-throat, orthopedic, and pediatric hospitals. Excluded are federal hospitals (Veterans Administration, Department of Defense, and Indian Health Service hospitals), long-term hospitals, psychiatric hospitals, alcohol/chemical dependency treatment facilities, and hospital units within institutions such as prisons.

The sampling frame is limited to pediatric discharges from community, non-rehabilitation hospitals in 36 participating HCUP Partner states.

Pediatric discharges are defined as all discharges where a patient was 20 years or less at admission. Discharges with missing, invalid, or inconsistent ages are excluded. Pediatric discharges are identified as one of three types of records:

- Uncomplicated in-hospital births (HOSPBRTH = 1 and UNCBRTH = 1)
- Complicated in-hospital births (HOSPBRTH = 1 and UNCBRTH = 0)
- All other pediatric cases (HOSPBRTH = 0).

In-hospital births (HOSPBRTH = 1) are identified by any principal or secondary diagnosis code in the range of V3000 to V3901 with the last two digits of "00" or "01" and the patient is not transferred from another acute care hospital or health care facility. Uncomplicated births (UNCBRTH = 1) have a Diagnosis Related Group (DRG) equal to 391 indicating "Normal Newborn."

Unlike the HCUP Nationwide Inpatient Sample (NIS), the KID does not involve a two-stage sampling procedure. Instead, the KID includes a sample of pediatric discharges from all hospitals in the sampling frame. For the sampling, pediatric discharges are stratified by uncomplicated in-hospital birth, complicated in-hospital birth, and all other pediatric cases. To further ensure an accurate representation of each hospital's pediatric case-mix, the discharges are sorted by state, hospital, DRG, and a random number within each DRG. Systematic random sampling is used to select 10 percent of uncomplicated in-hospital births and 80 percent of complicated in-hospital births and other pediatric cases from each frame hospital.

To obtain national estimates, discharge weights are developed using the AHA universe as the standard. For the weights, hospitals are post-stratified on six characteristics contained in the AHA hospital files. These were the same characteristics used to define the NIS sampling strata (ownership/control, bedsize, teaching status, rural/urban location, and U.S. region), with the addition of a stratum for freestanding children's hospitals. To create weights, if there were fewer than two frame hospitals, 30 uncomplicated births, 30 complicated births, and 30 non-birth pediatric discharges sampled in a stratum, that stratum is combined with an "adjacent" stratum containing hospitals with similar characteristics. Discharge weights are created by stratum in proportion to the number of AHA newborns for newborn discharges and in proportion to the total number of (non-newborn) AHA discharges for non-newborn discharges. For detailed information on the design of the KID, refer to the special report, *Design of the Kids' Inpatient Database, 2003,* available on the KID Documentation CD-ROM and on the HCUP-US Website.

KID data sets are currently available for multiple years, as shown in Table 1. Each release of the KID includes:

- Data in fixed-width ASCII format on CD-ROM.
- 2 million to 3 million pediatric inpatient records per year.
- 2,500 to 3,400 hospitals per year.
- Discharge-level weights to calculate national estimates for discharges.
- Hospital File to link the KID to data from the American Hospital Association Annual Survey of Hospitals.
- KID Documentation and tools, also on CD-ROM – including file specifications, programming source code for loading ASCII data into SAS and SPSS, and value labels.

Table 1. Summary of KID Releases

Data from	Media/format options	Structure of Releases
▪ 1997 ▪ 22 states ▪ 2000 ▪ 27 states ▪ 2003 ▪ 36 states	On CD-ROM, in ASCII format	1 year of data in a 2-CD set, compressed files Beginning in 2003, a companion file with four different sets of severity measures

KID Data Sources, Hospitals, and Inpatient Stays

Table 2 summarizes the data sources, number of hospitals, and number of inpatient stays in each KID database. It also lists the differences in types of hospitals and age inclusion for pediatric cases.

Table 2. Summary of KID Data Sources, Hospitals, and Inpatient Stays, 1997, 2000, and 2003

	2003	2000	1997
Number of States	36	27	22
Data Sources	AZ CA CO CT FL GA HI IA IL IN KS KY MD MA MI MN MO NC NE NH NJ NV NY OH OR RI SC SD TN TX UT VA VT WA WI WV *(Added IL, IN, MI, MN, NE, NH, NV, OH, RI, SD, VT. ME and PA are not included)*	AZ CA CO CT FL GA HI IA KS KY MD MA ME MO NC NJ NY OR PA SC TN TX UT VA WA WI WV *(Added KY, ME, NC, TX, VA, WV. IL is not included)*	AZ CA CO CT FL GA HI IL IA KS MD MA MO NJ NY OR PA SC TN UT WA WI
Hospitals	Community, *non-rehabilitation* hospitals	Community, *non-rehabilitation* hospitals	Community hospitals, *including rehabilitation hospitals*
Number of Hospitals	3,438	2,784	2,521
Hospital identifiers	Available for 23 out of 36 states	Available for 19 out of 27 states	None – only general descriptors of hospital types
Definition of pediatric discharges	Age at admission of *20* years or less	Age at admission of *20* years or less	Age at admission of *18* years or less
Number of pediatric discharges (unweighted)	2,984,129	2,516,833	1,905,797
Number of pediatric discharges (weighted)	7,409,162	7,291,032	6,657,326

State-Specific Restrictions

Some data sources that contributed data to the KID imposed restrictions on the release of certain data elements or on the number and types of hospitals that could be included in the database. Because of confidentiality laws, some data sources were prohibited from providing HCUP with discharge records that indicated specific medical conditions, such as HIV/AIDS or behavioral health. Detailed information on these state-specific restrictions is available in the report on *Sources of KID Data and State-specific Restrictions* found on the KID Documentation CD-ROM.

Contents of CD-ROM Set

There are two types of files included in the KID: 1) data files and 2) documentation and tools files.

1) Data Files - three types of fixed-width ASCII formatted data files are included in the KID, beginning with the 2003 data:

   Inpatient Core File: The Core file contains pediatric discharges sampled from community, non-rehabilitation hospitals in participating HCUP States. The unit of observation is an *inpatient stay record*. The Core file contains data elements for linkage, patient demographics, clinical information, and payment information. Sample weights for the three types of records, uncomplicated in-hospital births, complicated in-hospital births, and all other pediatric cases, are calculated separately by stratum and are added to each discharge in the Core File, as appropriate, so that only one discharge weight variable (DISCWT) is needed. See Table 3 for a list of data elements in the Inpatient Core File. This file is available in all years.

   Hospital File: The hospital-level file contains one observation for each hospital included in the KID and contains variance estimation data elements, as well as linkage data elements. The unit of observation is the *hospital*. The HCUP hospital identifier (HOSPID) provides the linkage between the KID Inpatient Core file and the Hospital file. See Table 4 for a list of data elements in the Hospital File. This file is available in all years.

   Disease Severity Measures File: This discharge-level file contains information from four different sets of disease severity measures. Information from the severity file is to be used in conjunction with the inpatient Core file. The unit of observation is an *inpatient stay record*. The HCUP unique record identifier (RECNUM) provides the linkage between the Core file and the Disease Severity Measures files. See Table 5 for a list of data elements in the Severity Measures Files. These files are available beginning with the 2003 KID.

2) Documentation and Tools Files

   Documentation: Complete file documentation, variable notes, and summary statistics are provided in a series of Portable Document Format (*.pdf) files. These files are detailed in Table 6.

   SAS source code: Code is included for the format library for the variables and for loading ASCII data into SAS format.

   SPSS source code: Code is included for the variable library and for loading ASCII data into SPSS format.

Labels: Labels are included for the Clinical Classifications Software (CCS), formerly called the Clinical Classifications for Health Policy Research (CCHPR), and for the Diagnosis-Related Groups (multiple versions).

File Specifications: Record layouts for all data files.

KID Data Elements

The KID contains two types of data: inpatient stay core records and hospital information. Table 3 and Table 4 identify the data elements that can be found in the inpatient stay core and hospital files, respectively. Beginning with the 2003 KID, an additional file including four different sets of disease severity measures is included. Table 5 identifies the data elements in the disease severity measures files.

Not all data elements in the KID are uniformly coded or available across all States. This is not complete documentation for the data; please refer to the KID Documentation CD-ROM for full documentation on all data elements, for summary statistics, and for the record layout.

Table 3. Data Elements in the KID Inpatient Core File

Note: Not all data elements in the KID are uniformly coded or available across all States. The 2003 KID differs from the 2000 KID release in that some data elements were dropped, some were added, and the values of some data elements were changed.

Data elements that are italicized are not included in the 2003 KID, but are only available in previous years' files.

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
Admission day of week or weekend	AWEEKEND	2000, 2003	Admission on weekend: (0) admission on Monday-Friday, (1) admission on Saturday-Sunday	
	ADAYWK	*1997*	*Admission day of week: (1) Sunday, (2) Monday, (3) Tuesday, (4) Wednesday, etc.*	
Admission month	AMONTH	1997, 2000, 2003	Admission month coded from (1) January to (12) December	CT, FL
Admission source	ASOURCE	1997, 2000, 2003	Admission source, uniform coding: (1) ER, (2) another hospital, (3) another facility including long-term care, (4) court/law enforcement, (5) routine/birth/other	
	ASOURCE_X	2000, 2003	Admission source, as received from data source using State-specific coding	
	ASOURCEUB92	2003	Admission source (UB-92 standard coding). For newborn admissions (ATYPE = 4): (1) normal delivery, (2) premature delivery, (3) sick baby, (4) extramural birth; For non-newborn admissions (ATYPE NE 4): (1) physician referral, (2) clinic referral, (3) HMO referral, (4) transfer from a hospital, (5) transfer from a skilled nursing facility, (6) transfer from a another health care facility, (7) emergency room, (8) court/law enforcement, (A) transfer from a critical access hospital	CA, CT, MD
Admission type	ATYPE	1997, 2000, 2003	Admission type, uniform coding: (1) emergency, (2) urgent, (3) elective, (4) newborn, (5) trauma center beginning in 2003 data, (6) other	CA
	ELECTIVE	2003	Indicates elective admission: (1) elective, (0) non-elective admission	
Age at admission	AGE	1997, 2000, 2003	Age in years coded 0-124 years	
	AGEDAY	1997, 2000, 2003	Age in days coded 0-365 only when the age in years is less than 1	CT, FL, MA, NH, SC, TX
	AGEMONTH	1997, 2000, 2003	Age in months (when age < 11 years)	CT, FL, SC, TX

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
Birth weight	BWT	2000, 2003	Birth weight in grams	CA, FL, IA, IL, KS, MI, MN, MO, NE, NH, NV, NY, OH, OR, SC, SD, TN, TX, UT, WA, WI, WV
Clinical Classifications Software (CCS) category	DXCCS1 - DXCCS15	2000, 2003	CCS category for all diagnoses	
	DCCHPR1	*1997*	*CCS category for principal diagnosis in 1997. CCS was formerly called the Clinical Classifications for Health Policy Research (CCHPR)*	
	PRCCS1 - PRCCS15	2000, 2003	CCS category for all procedures	
	PCCHPR1	*1997*	*CCS category for principal procedure in 1997. CCS was formerly called the Clinical Classifications for Health Policy Research (CCHPR)*	
Diagnosis information	DX1 - DX15	1997, 2000, 2003	Diagnoses, principal and secondary (ICD-9-CM). Beginning in 2003, the diagnosis array does not include any of external cause of injury codes. These codes have been stored in a separate array ECODEn.	
	DXV1 - DXV15	*1997*	*Diagnosis validity flags*	
	HOSPBRTH	1997, 2000, 2003	Birth diagnosis, in this hospital	
	NDX	1997, 2000, 2003	Number of diagnoses coded on the original record	
	UNCBRTH	1997, 2000, 2003	Normal, uncomplicated birth in hospital	
Diagnosis Related Group (DRG)	DRG	1997, 2000, 2003	DRG in use on discharge date	
	DRGVER	2000, 2003	Grouper version in use on discharge date	
	DRG10	*1997*	*DRG Version 10 (effective October 1992 - September 1993)*	
	DRG18	2000, 2003	DRG Version 18 (effective October 2000 - September 2001)	
Discharge quarter	DQTR	1997, 2000, 2003	Coded: (1) Jan - Mar, (2) Apr - Jun, (3) Jul - Sep, (4) Oct - Dec	
Discharge weights	DISCWT	2000, 2003	Weight to discharges in AHA universe for national estimates. In 2000, the discharge weight DISCWTcharge should be used for estimates of total charges.	

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
	DISCWT_U	*1997*	*Weight to discharges in AHA universe for national estimates.*	
	DISCWTcharge	*2000*	*Weight to discharges in AHA universe for total charge estimates.*	
Discharge year	YEAR	1997, 2000, 2003	Calendar year	
Disposition of patient (discharge status)	DIED	1997, 2000, 2003	Indicates in-hospital death: (0) did not die during hospitalization, (1) died during hospitalization	
	DISP	*1997*	*Disposition of patient, uniform coding in 1997: (1) routine, (2) short-term hospital, (3) skilled nursing facility, (4) intermediate care facility, (5) another type of facility, (6) home health care, (7) against medical advice, (20) died*	
	DISPUB92	2000, 2003	Disposition of patient (UB-92 standard coding)	CA, MD
	DISPUNIFORM	2000, 2003	Disposition of patient, uniform coding used beginning in 1998: (1) routine, (2) transfer to short term hospital, (5) other transfers, including skilled nursing facility, intermediate care, and another type of facility, (6) home health care, (7) against medical advice, (20) died in hospital, (99) discharged alive, destination unknown	
External causes of injury and poisoning	ECODE1 – ECODE4	2003	External cause of injury and poisoning code, primary and secondary (ICD-9-CM). Beginning in 2003, external cause of injury codes are stored in a separate array ECODEn from the diagnosis codes in the array DXn. Prior to 2003, these codes are contained in the diagnosis array (DXn).	
	E_CCS1 - E_CCS4	2003	CCS category for the external cause of injury and poisoning codes	
	NECODE	2003	Number of external cause of injury codes on the original record.	
Gender of patient	FEMALE	2000, 2003	Indicates gender for KID beginning in 1998: (0) male, (1) female	
	SEX	*1997*	*Indicates gender in 1997 KID: (1) male, (2) female*	
Hospital information	DSHOSPID	2000, 2003	Hospital number as received from the data source	CT, GA, HI, IN, KS, MI, MO, NE, OH, SC, SD, TN, TX

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
	HOSPID	2000, 2003	HCUP hospital number (links to Hospital file)	
	HOSPNUM	*1997*	*HCUP hospital number in 1997 (links to Hospital file)*	
	HOSPST	2000, 2003	State postal code for the hospital (e.g., AZ for Arizona)	
	HOSPSTCO	*2000*	*Modified Federal Information Processing Standards (FIPS) State/county code for the hospital links to Area Resource File (available from the Bureau of Health Professions, Health Resources and Services Administration). Beginning in 2003, this data element is available only on the hospital file.*	
	KID_STRATUM	2000, 2003	Hospital stratum used for weights.	
Length of Stay	LOS	1997, 2000, 2003	Length of stay, edited	
	LOS_X	1997, 2000, 2003	Length of stay, as received from data source	
Location of the patient	PL_UR_CAT4	2003	Urban–rural designation for patient's county of residence: (1) large metropolitan, (2) small metropolitan, (3) micropolitan, (4) non-core	
Major Diagnosis Category (MDC)	MDC	1997, 2000, 2003	MDC in use on discharge date	
	MDC10	*1997*	*MDC Version 10 (effective October 1992 - September 1993)*	
	MDC18	2000, 2003	MDC Version 18 (effective October 2000 - September 2001)	
Median household income for patient's ZIP Code	ZIPINC_QRTL	2003	Median household income quartiles for patient's ZIP Code. For 2003, the median income quartiles are defined as: $1 - $35,999; $36,000 - $44,999; $45,000 - $59,999; and $60,000 or more.	
	ZIPINC	*2000*	*Median household income category in files beginning in 1998: (1) $1-$24,999, (2) $25,000-$34,999, (3) $35,000-$44,999, (4) $45,000 and above*	
	ZIPINC4	*1997*	*Median household income category in 1997: (1) $1-$25,000, (2) $25,001-$30,000, (3) $30,001-$35,000, (4) $35,001 and above*	

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
Neonatal/ maternal flag	NEOMAT	1997, 2000, 2003	Assigned from diagnoses and procedure codes: (0) not maternal or neonatal, (1) maternal diagnosis or procedure, (2) neonatal diagnosis, (3) maternal and neonatal on same record	
Payer information Payer information (continued)	PAY1	1997, 2000, 2003	Expected primary payer, uniform: (1) Medicare, (2) Medicaid, (3) private including HMO, (4) self-pay, (5) no charge, (6) other	
	PAY1_N	*1997*	*Expected primary payer, nonuniform: (1) Medicare, (2) Medicaid, (3) Blue Cross, Blue Cross PPO, (4) commercial, PPO, (5) HMO, PHP, etc., (6) self-pay, (7) no charge, (8) Title V, (9) Worker's Compensation, (10) CHAMPUS, CHAMPVA, (11) other government, (12) other*	
	PAY1_X	2000, 2003	Expected primary payer, as received from the data source	
	PAY2	1997, 2000, 2003	Expected secondary payer, uniform: (1) Medicare, (2) Medicaid, (3) private including HMO, (4) self-pay, (5) no charge, (6) other	AZ, CA, CO, FL, HI, IA, NH, OH, RI, SD, VA
	PAY2_N	*1997*	*Expected secondary payer, nonuniform: (1) Medicare, (2) Medicaid, (3) Blue Cross, Blue Cross PPO, (4) commercial, PPO, (5) HMO, PHP, etc., (6) self-pay, (7) no charge, (8) Title V, (9) Worker's Compensation, (10) CHAMPUS, CHAMPVA, (11) other government, (12) other*	
	PAY2_X	2000, 2003	Expected secondary payer, as received from the data source	AZ, CA, CO, FL, HI, IA, NH, OH, RI, SD, VA
Physician identifiers, synthetic	MDNUM1_R	2003	Re-identified attending physician number in files starting in 2003	CA, CT, GA, HI, IL, IN, KS, MA, NC, OH, UT, VT, WI, WV
	MDID_S	*1997, 2000*	*Synthetic attending physician number in 1997 and 2000 KID*	
	MDNUM2_R	2003	Re-identified secondary physician number in files starting in 2003	CA, CT, GA, HI, IL, IN, KS, MA, NC, OH, UT, VT, WI, WV

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
	SURGID_S	*1997, 2000*	*Synthetic second physician number in 1997 and 2000 KID*	
Procedure information	PR1 - PR15	1997, 2000, 2003	Procedures, principal and secondary (ICD-9-CM)	
	PRV1 -PRV15	*1997*	*Procedure validity flag*	
	NPR	1997, 2000, 2003	Number of procedures coded on the original record	
	PRDAY1	1997, 2000, 2003	Number of days from admission to principal procedure.	IL, KS, OH, UT, WA, WV
	PRDAY2 - PRDAY15	2000, 2003	Number of days from admission to secondary procedures.	IL, KS, OH, UT, WA, WV
Race of Patient	RACE	1997, 2000, 2003	Race, uniform coding: (1) white, (2) black, (3) Hispanic, (4) Asian or Pacific Islander, (5) Native American, (6) other	GA, IL, KY, MN, NE, NV, OH, OR, WA, WV
Record identifier, synthetic	RECNUM	1997, 2003	HCUP unique record number	
	KEY	*2000*	*Unique record number for 2000 KID file*	
Total Charges	TOTCHG	1997, 2000, 2003	Total charges, edited	
	TOTCHG_X	1997, 2000, 2003	Total charges, as received from data source	

Table 4. Data Elements in the KID Hospital File

Note: Not all data elements in the KID are uniformly coded or available across all States. The 2003 KID differs from the 2000 KID release in that some data elements were dropped, some were added, and the values of some data elements were changed.

Data elements that are italicized are not included in the 2003 KID, but are only available in previous years' files.

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
Universe Counts	N_DISC_U	1997, 2000, 2003	Number of universe discharges in the KID_STRATUM	
	N_BRTH_U	1997, 2000, 2003	Number of universe births in KID_STRATUM	
	N_HOSP_U	1997, 2000, 2003	Number of universe hospitals in KID_STRATUM	
Sample Counts	S_DISC_U	1997, 2000, 2003	Number of sampled discharges in the sampling stratum (KID_STRATUM or STRATUM)	
	S_BRTH_U	1997, 2000, 2003	Number of sample births in KID_STRATUM	
	S_CHLD_U	1997, 2000, 2003	Number of sample pediatric non-births in KID_STRATUM	
	S_CMPB_U	1997, 2000, 2003	Number of sample complicated births in KID_STRATUM	
	S_UNCB_U	1997, 2000, 2003	Number of sample uncomplicated births in KID_STRATUM	
	S_HOSP_U	1997, 2000, 2003	Number of sample hospitals in KID_STRATUM	
SID (Frame) Counts	PEDS_DISC	2000, 2003	Number of discharges, 20 years old or younger, from this hospital in the SID	GA
	PEDS_PCT	2000, 2003	Percentage of hospital discharges, 20 years old or younger, from this hospital in the SID	GA
	TOTAL_DISC	2000, 2003	Total number of discharges from this hospital in the SID	GA
	TOTDSCHG	*1997*	*Total number of discharges from this hospital in the SID*	
Hospital Identifiers	HOSPID	2000, 2003	HCUP hospital identification number (links to inpatient Core files)	
	HOSPNUM	*1997*	*HCUP hospital identification number (links to inpatient Core files)*	
	AHAID	2000, 2003	AHA hospital identifier that matches AHA Annual Survey of Hospitals	CT, GA, HI, IN, KS, MI, MO, NE, OH, SC, SD, TN, TX
	IDNUMBER	2000, 2003	AHA hospital identifier without the leading 6	CT, GA, HI, IN, KS, MI, MO, NE, OH, SC, SD, TN, TX

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
	HOSPNAME	2000, 2003	Hospital name from AHA Annual Survey of Hospitals	CT, GA, HI, IN, KS, MI, MO, NE, OH, SC, SD, TN, TX
	NACHTYPE	1997, 2000, 2003	National Association of Children's Hospitals and Related Institutions (NACHRI) hospital type: (0) not identified as a children's hospital by NACHRI, (1) children's general hospital, (2) children's specialty hospital, (3) children's unit in a general hospital	GA, NE
Hospital Location	HOSPADDR	2000, 2003	Hospital address from AHA Annual Survey of Hospitals	CT, GA, HI, IN, KS, MI, MO, NE, OH, SC, SD, TN, TX
	HOSPCITY	2000, 2003	Hospital city from AHA Annual Survey of Hospitals	CT, GA, HI, IN, KS, MI, MO, NE, OH, SC, SD, TN, TX
	HOSPST	2000, 2003	Hospital state postal code for hospital (e.g., AZ for Arizona)	
	HOSPSTCO	2003	Modified Federal Information Processing Standards (FIPS) State/county code for the hospital links to Area Resource File (available from the Bureau of Health Professions, Health Resources and Services Administration)	CT, GA, HI, IN, KS, MI, MO, NE, OH, SC, SD, TN, TX
	HOSPZIP	2000, 2003	Hospital ZIP Code from AHA Annual Survey of Hospitals	CT, GA, HI, IN, KS, MI, MO, NE, OH, SC, SD, TN, TX
Hospital Characteristics	KID_STRATUM	2000, 2003	Hospital stratum used for weights	
	STRATUM	*1997*	*Hospital stratum used for weights in 1997*	
	HOSP_BEDSIZE	2000, 2003	Bed size of hospital: (1) small, (2) medium, (3) large	
	H_BEDSZ	*1997*	*Bed size of hospital: (1) small, (2) medium, (3) large*	
	HOSP_CONTROL	2000, 2003	Control/ownership of hospital: (0) government or private, collapsed category, (1) government, nonfederal, public, (2) private, non-profit, voluntary, (3) private, invest-own, (4) private, collapsed category	
	H_CONTRL	*1997*	*Control/ownership of hospital: (1) government, nonfederal (2) private, non-profit (3) private, invest-own*	
	HOSP_ LOCATION	2000, 2003	Location: (0) rural, (1) urban	
	H_LOC	*1997*	*Location: (0) rural, (1) urban*	

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
	HOSP_ LOCTEACH	2000, 2003	Location/teaching status of hospital: (1) rural, (2) urban non-teaching, (3) urban teaching	
	H_LOCTCH	*1997*	*Location/teaching status of hospital: (1) rural, (2) urban non-teaching, (3) urban teaching*	
	HOSP_REGION	2000, 2003	Region of hospital: (1) Northeast, (2) Midwest, (3) South, (4) West	
	H_REGION	*1997*	*Region of hospital: (1) Northeast, (2) Midwest, (3) South, (4) West*	
	HOSP_TEACH	2000, 2003	Teaching status of hospital: (0) non-teaching, (1) teaching	
	H_TCH	*1997*	*Teaching status of hospital: (0) non-teaching, (1) teaching*	
Discharge Year	YEAR	1997, 2000, 2003	Calendar year	
Note: Because the following variables are not needed for calculating national estimates, they are not included in the 2003 KID Hospital file.				
Discharge Weights	*CHLDWT*	*2000*	*Weight to pediatric non-births in universe for national estimates. In 2000, the discharge weight CHLDWTcharge should be used for estimates of total charges.*	
	CHLDWT_U	*1997*	*Weight to pediatric cases in universe for national estimates. In the 1997 data , one weight CHLDWT_U is used to create all estimates.*	
	CHLDWTCHARGE	*2000*	*Weight to pediatric non-births in universe for total charge estimates*	
	CMPBWT	*2000*	*Weight to complicated births in universe for national estimates. In 2000, the discharge weight CMPBWTcharge should be used for estimates of total charges.*	
	CMPBWTCHARGE	*2000*	*Weight to complicated births in universe for total charge estimates*	
	UNCBWT	*2000*	*Weight to uncomplicated births in universe for national estimates. In 2000, the discharge weight UNCBWTcharge should be used for estimates of total charges.*	
	UNCBWTCHARGE	*2000*	*Weight to uncomplicated births in universe for total charge estimates*	
Frame Counts	*H_BRTH_F*	*1997, 2000*	*Number of frame HCUP births in KID_STRATUM*	
	H_CHLD_F	*1997, 2000*	*Number of frame HCUP pediatric non-births in KID_STRATUM*	
	H_CMPB_F	*1997, 2000*	*Number of frame HCUP complicated births in KID_STRATUM*	
	H_UNCB_F	*1997, 2000*	*Number of frame HCUP uncomplicated births in KID_STRATUM*	
	H_DISC_F	*1997, 2000*	*Number of frame HCUP discharges in KID_STRATUM*	

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes	Unavailable in 2003 for:
	H_HOSP_F	*1997, 2000*	*Number of frame HCUP hospitals in KID_STRATUM*	
Sample Counts	*S_CHLD*	*1997, 2000*	*Pediatric non-births sampled*	
	S_CMPB	*1997, 2000*	*Complicated births sampled*	
	S_UNCB	*1997, 2000*	*Uncomplicated births sampled*	

Table 5. Data Elements in the KID Disease Severity Measures Files
All data elements listed below are available for all states in the 2003 KID Disease Severity Measures Files.

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes
AHRQ Comorbidity Software (AHRQ)	CM_AIDS	2003	AHRQ comorbidity measure: Acquired immune deficiency syndrome
	CM_ALCOHOL	2003	AHRQ comorbidity measure: Alcohol abuse
	CM_ANEMDEF	2003	AHRQ comorbidity measure: Deficiency anemias
	CM_ARTH	2003	AHRQ comorbidity measure: Rheumatoid arthritis/collagen vascular diseases
	CM_BLDLOSS	2003	AHRQ comorbidity measure: Chronic blood loss anemia
	CM_CHF	2003	AHRQ comorbidity measure: Congestive heart failure
	CM_CHRNLUNG	2003	AHRQ comorbidity measure: Chronic pulmonary disease
	CM_COAG	2003	AHRQ comorbidity measure: Coagulopathy
	CM_DEPRESS	2003	AHRQ comorbidity measure: Depression
	CM_DM	2003	AHRQ comorbidity measure: Diabetes, uncomplicated
	CM_DMCX	2003	AHRQ comorbidity measure: Diabetes with chronic complications
	CM_DRUG	2003	AHRQ comorbidity measure: Drug abuse
	CM_HTN_C	2003	AHRQ comorbidity measure: Hypertension, uncomplicated and complicated
	CM_HYPOTHY	2003	AHRQ comorbidity measure: Hypothyroidism
	CM_LIVER	2003	AHRQ comorbidity measure: Liver disease
	CM_LYMPH	2003	AHRQ comorbidity measure: Lymphoma
	CM_LYTES	2003	AHRQ comorbidity measure: Fluid and electrolyte disorders
	CM_METS	2003	AHRQ comorbidity measure: Metastatic cancer
	CM_NEURO	2003	AHRQ comorbidity measure: Other neurological disorders
	CM_OBESE	2003	AHRQ comorbidity measure: Obesity
	CM_PARA	2003	AHRQ comorbidity measure: Paralysis
	CM_PERIVASC	2003	AHRQ comorbidity measure: Peripheral vascular disorders
	CM_PSYCH	2003	AHRQ comorbidity measure: Psychoses
	CM_PULMCIRC	2003	AHRQ comorbidity measure: Pulmonary circulation disorders
	CM_RENLFAIL	2003	AHRQ comorbidity measure: Renal failure
	CM_TUMOR	2003	AHRQ comorbidity measure: Solid tumor without metastasis
	CM_ULCER	2003	AHRQ comorbidity measure: Peptic ulcer disease excluding bleeding
	CM_VALVE	2003	AHRQ comorbidity measure: Valvular disease
	CM_WGHTLOSS	2003	AHRQ comorbidity measure: Weight loss

Type of Data Element	HCUP Variable Name	Years Available	Coding Notes
All Patient Refined DRG (3M)	APRDRG	2003	All Patient Refined DRG
	APRDRG_Risk_ Mortality	2003	All Patient Refined DRG: Risk of Mortality Subclass
	APRDRG_Severity	2003	All Patient Refined DRG: Severity of Illness Subclass
All-Payer Severity-adjusted DRG (HSS, Inc.)	APSDRG	2003	All-Payer Severity-adjusted DRG
	APSDRG_ Mortality_Weight	2003	All-Payer Severity-adjusted DRG: Mortality Weight
	APSDRG_LOS_ Weight	2003	All-Payer Severity-adjusted DRG: Length of Stay Weight
	APSDRG_Charge _Weight	2003	All-Payer Severity-adjusted DRG: Charge Weight
Disease Staging (Medstat)	DS_DX_ Category1	2003	Disease Staging: Principal Disease Category
	DS_Stage1	2003	Disease Staging: Stage of Principal Disease Category
	DS_LOS_Level	2003	Disease Staging: Length of Stay Level
	DS_LOS_Scale	2003	Disease Staging: Length of Stay Scale
	DS_Mrt_Level	2003	Disease Staging: Mortality Level
	DS_Mrt_Scale	2003	Disease Staging: Mortality Scale
	DS_RD_Level	2003	Disease Staging: Resource Demand Level
	DS_RD_Scale	2003	Disease Staging: Resource Demand Scale
Linkage Variables	HOSPID	2003	HCUP hospital identification number
	RECNUM	2003	HCUP record identifier

SAMPLING OF DISCHARGES INCLUDED IN THE KID

Unlike the HCUP Nationwide Inpatient Sample (NIS), the KID does not involve sampling hospitals. Instead, the KID includes a sample of pediatric discharges from all hospitals in the sampling frame. For the sampling, pediatric discharges in all participating states are stratified by uncomplicated in-hospital birth, complicated in-hospital birth, and all other pediatric cases. To further ensure an accurate representation of each hospital's pediatric case-mix, the discharges are sorted by state, hospital, DRG, and a random number within each DRG. Systematic random sampling is used to select 10 percent of uncomplicated in-hospital births and 80 percent of complicated in-hospital births and other pediatric cases from each frame hospital.

To obtain national estimates, discharge weights are developed using the AHA universe as the standard. For the weights, hospitals are post-stratified on six characteristics contained in the AHA hospital files. These were the same characteristics used to define the NIS sampling strata (ownership/control, bedsize, teaching status, rural/urban location, and U.S. region), with the addition of a stratum for freestanding children's hospitals. If there were fewer than two frame hospitals, 30 uncomplicated births, 30 complicated births, and 30 non-birth pediatric discharges sampled in a stratum, that stratum is combined with an "adjacent" stratum containing hospitals with similar characteristics. Discharge weights are created by stratum in proportion to the number of AHA newborns for newborn discharges and in proportion to the total number of (non-newborn) AHA discharges for non-newborn discharges. For detailed information on the design of the KID, refer to the special report, *Design of the Kids' Inpatient Database, 2003,* available on the KID Documentation CD-ROM and on the HCUP-US Website.

GETTING STARTED

KID information is provided on two CD-ROMs. The KID data files are on CD-ROM #1 and the KID documentation and tools are on CD-ROM #2.

KID Data Files

In order to load KID data onto your PC, you will need about five gigabytes of space available. Because of the size of the files, the data are distributed as self-extracting PKZIP compressed files. To decompress the data, you should follow these steps:

1. Create a directory for the KID on your hard drive.
2. Copy the self-extracting data files from the KID Data Files CD-ROM into the new directory.
3. Unzip each file by running the corresponding *.exe file.
    - Type the file name within DOS or click on the name within Windows Explorer.
    - Edit the name of the "Unzip To Folder" in the WinZip Self-Extractor dialog to select the desired destination directory for the extracted file.
    - Click on the "Unzip" button.

The ASCII data files will then be uncompressed into this directory. After the files are uncompressed, the *.exe files can be deleted.

KID Documentation

KID documentation files on the Documentation CD-ROM provide important user resources. Refer to these to understand the structure and content of the KID and to aid in its use. Many of the documentation files are provided in portable document format (*.pdf) files. Files with the *.pdf extension can be viewed, searched, and printed using the Adobe Acrobat Reader®.

You must have the Adobe Acrobat Reader software on your computer to access the KID documentation. If you do not have this software on your computer, see the DOCUMENTATION.README.TXT file on KID Documentation CD-ROM for instructions on installing or obtaining the software.

The Acrobat Reader provided on the KID Documentation CD-ROM is designed for IBM-compatible microcomputers running Microsoft Windows 98 Second Edition or higher. More information and Acrobat Reader software for other platforms (DOS, Windows 3.1, Macintosh, Sun Systems, etc.) may be obtained free of charge from the Adobe Home Page at http://www.adobe.com/. For further assistance in installing and running the Adobe Acrobat Reader on your computer platform, please consult your local support personnel.

Table 6 describes the documentation and tools files that can be found on the KID Documentation CD-ROM. It also illustrates the structure of the directories and subdirectories on the CD. All KID documentation is also available on the HCUP User Support (HCUP-US) Website at http://www.hcup-us.ahrq.gov.

Table 6. KID Documentation CD-ROM

Directory	Description
Root	Includes DOCUMENTATION.README.TXT file with introductory information on accessing the KID documentation
/Adobe Acrobat Reader	Adobe Acrobat Reader files for IBM compatible for Microsoft Windows 98 Second Edition or higher. (One text, one HTML, and one application file)
/Description of Data Elements	Includes information on all KID variables such as uniform coding and state-specific information: Core (for data elements starting with letters A-L and letters M-Z), Disease Severity Measures, and Hospital. (PDF files)
/File Specifications	Includes data set name, number of records, record length, and record layout. One file per data file: Core, Disease Severity Measures, and Hospital. (Text files)
/General Information	Includes: • Introduction to the KID, 2003 (PDF file) – *this document* • Availability of KID data elements across all years (PDF file) • Sources of KID Data and State-Specific Restrictions (PDF file)
/HCUP Tools_Labels	Includes: • Label file for the Clinical Classifications Software (CCS), a categorization scheme that groups ICD-9-CM diagnosis and procedure codes into mutually exclusive categories (Text file) • Label file for Diagnosis Related Groups (DRGs), multiple versions provided (Text file) • SAS code to create format library of variable labels (Text file)
/SAS Load Programs	SAS programming code to convert ASCII data files into SAS. One file per data file: Core, Disease Severity Measures, and Hospital. (Text files)
/Severity Adjustment Reports	Includes information on each of the severity measures: Overview of Severity Systems, documentation for APR-DRGS, documentation of APS-DRGS, and documentation for Disease Staging.
/Special Reports	Includes: • Design of the Kids' Inpatient Database, 2003 (PDF file) • Changes in NIS Sampling and Weighting Stategy for 1998 (PDF file) • KID Comparison Report, 1997 (PDF file) • KID Comparison Report Errata, 1997 (PDF file) • Calculating Kids' Inpatient Database Variances (PDF file) • HCUP Coding Practices (PDF file) • HCUP Quality Control Procedures (PDF file) • HCUP Hospital Identifiers (PDF file)
/SPSS Load Programs	SPSS programming code to convert ASCII data files into SPSS. One file per data file: Core, Disease Severity Measures, and Hospital. (Text files)

/Summary Statistics	Includes summary statistics (means and frequencies) on KID data. • One file per data file: Core (weighted and unweighted), Disease Severity Measures, and Hospital (PDF files) • HCUP Summary Statistics - KID 2003 – Data Quality Report (provides information on data quality edit check failures)

HOW TO USE THE KID

This section provides a brief synopsis of special considerations when using the KID. For more details see detailed documentation under Special Reports, Description of Data Elements, and Summary Statistics.

- If anyone other than the original purchaser uses the KID data, be sure to have them read and sign a data use agreement. A copy of the signed data use agreements must be sent to AHRQ. See page 2 for the mailing address. A copy of the KID Data Use Agreement is provided in the binder you receive when you purchase the KID and is available on the HCUP User Support Website: http://www.hcup-us.ahrq.gov.

- The KID contains discharge-level records, not patient-level records. This means that individual patients who are hospitalized multiple times in one year may be present in the KID multiple times. There is no uniform patient identifier available that allows a patient-level analysis with the KID. This will be especially important to remember for certain conditions for which patients may be hospitalized multiple times in a single year.

Creating National Estimates

- To produce national estimates, use one of the following discharge weights to weight discharges in the KID Core files to pediatric discharges from all U.S. community, non-rehabilitation hospitals. The name of the discharge weight data element depends on the year of data and the type of analysis.

KID Data Year	Name of Discharge Weight on the **Core File** to Use for Creating Nationwide Estimates
2003	• DISCWT for all analyses
2000	• DISCWT to create nationwide estimates for all analyses except those that involve total charges. • DISCWTCHARGE to create nationwide estimates of total charges.
1997	• DISCWT_U for all analyses

- Similar to the NIS, proper statistical techniques must be used to calculate standard errors and confidence intervals when using the KID. For detailed instructions, refer the special report *Calculating Nationwide Inpatient Sample Variances* on the HCUP-US website (www.hcup-us.ahrq.gov). In early 2006, a report specific to the KID, *Calculating Kids' Inpatient Database (KID) Variances,* will also be available on www.hcup-us.ahrq.gov.

- The 1997 KID Comparison Report (available on www.hcup-us.ahrq.gov) assesses the accuracy of 1997 KID estimates. The report for the 2003 KID will be posted on the HCUP User Support Website (www.hcup-us.ahrq.gov) as soon as it is completed. No comparison report was created for the 2000 KID.

- When creating national estimates, it is a good idea to check your estimates against other data sources, if available. For example, the National Hospital Discharge Survey (http://www.cdc.gov/nchs/products/pubs/pubd/series/sr13/ser13.htm) can provide benchmarks against which to check your national estimates for hospitalizations with more than 5000 cases.

Studying Trends

- When studying trends over time using the KID, be aware that the sampling frame for the KID changes over time, i.e., more states have been added. Estimates from earlier years of the KID may be subject to more sampling bias than later years of the KID.

- Short-term rehabilitation hospitals are included in the 1997 KID, but are excluded from the 2000 and 2003 KID. Patients treated in short-term rehabilitation hospitals tend to have lower mortality rates and longer lengths of stay than patients in other community hospitals. The elimination of rehabilitation hospitals may affect trends but the effect is likely small since only about 3 percent of community hospitals are short-term rehabilitation hospitals and not all state data sources included short term rehabilitation hospitals

Choosing Data Elements for Analysis

- For all data elements you plan to use in your analysis, first perform descriptive statistics and examine the range of values, including number of missing cases. Summary statistics for the entire KID are provided in the "Summary Statistics" directory on the KID Documentation CD-ROM. When you detect anomalies (such as large numbers of missing cases), perform descriptive statistics by state for that variable to detect if there are state-specific differences. Sometimes performing descriptive statistics by hospital can be helpful to detect hospital-specific data anomalies.

- Not all data elements in the KID are provided by each state data source. These data elements are provided on the KID because they can be valuable for research purposes but they should be used cautiously. For example, RACE is missing for a number of states thus national estimates using RACE should be interpreted and reported with caveats. Check the documentation and run frequencies by state to identify if a data element is not available in one or more states.

- There are differences across the state data sources in the collection of information that could not be accounted for during HCUP processing to make the data uniform. Be sure to read state-specific notes for each data element that you use in your analysis – this information can be found under "Description of Data Elements" on the KID Documentation CD-ROM.

- Data elements with "_X" suffixes contain state-specific coding, i.e., these data elements are provided by the data sources and have not been altered in any way. For some data elements (e.g., LOS_X and TOTCHG_X) this means that no edit checks have been applied. For other data elements (e.g., PAY1_X), the coding is specific to each state and may not be comparable to any other state.

ICD-9-CM Diagnosis and Procedure Codes

- ICD-9-CM diagnosis and procedure codes provide valuable insights into the reasons for hospitalization and what procedures patients receive, but these codes need to be carefully used and interpreted. ICD-9-CM codes change every October as new codes are introduced and some codes are retired.

- Although the KID contains up to 15 diagnoses and 15 procedures, the number of diagnoses and procedures varies by state. Some states provide as many as 30 diagnoses and 21 procedures, while other states provide as few as 10 diagnoses and 6 procedures. Because very few cases have more than 15 diagnoses or procedures, the diagnosis and procedure vectors were truncated to save space in the KID data files. Two variables are provided which tell you exactly how many diagnoses and procedures were on the original records (NDX and NPR).

- The collection and reporting of external cause of injury (E codes) varies greatly across states. Some States have laws or mandates for the collection of E codes; others do not. Some States do not require hospitals to report E codes in the range 870-879 - “misadventures to patients during surgical and medical care” - which means that these occurrences will be underreported. In the 2003 KID, E codes have been separated from the other diagnoses stored in DX1-DX15 and placed in ECODE1-ECODE4. Be sure to read the state-specific notes on diagnoses and E codes for more details - this can be found under "Description of Data Elements" on the KID Documentation CD-ROM.

OTHER HCUP PRODUCTS

Information on HCUP products and services is available on the World Wide Web on the AHRQ Website http://www.ahrq.gov/data/hcup/. HCUP User Support is available at http://www.hcup-us.ahrq.gov.

DATABASES

Nationwide Inpatient Sample (NIS) is a nationwide database of hospital inpatient stays. The NIS is the largest all-payer inpatient care database that is publicly available in the United States, containing data from 5 to 8 million hospital stays from about 1,000 hospitals sampled to approximate a 20-percent stratified sample of U.S. community hospitals. The NIS is available since 1988, allowing analysis of trends over time. For more information, visit the HCUP User Support Website at http://www.hcup-us.ahrq.gov or contact the HCUP Central Distributor (detailed below).

State Inpatient Databases (SID) are hospital inpatient databases from Data Organizations participating in HCUP. The SID contain the universe of the inpatient discharge abstracts in the participating HCUP States, translated into a uniform format to facilitate multi-State comparisons and analyses. For more information, visit the HCUP User Support Website at http://www.hcup-us.ahrq.gov or contact the HCUP Central Distributor (see below).

State Ambulatory Surgery Databases (SASD) are outpatient databases from Data Organizations in participating HCUP States, which capture surgeries performed on the same day in which patients are admitted and released. The SASD contain the ambulatory surgery encounter abstracts in participating States, translated into a uniform format to facilitate multi-State comparisons and analyses. All of the databases include abstracts from hospital-affiliated ambulatory surgery sites. Some contain the universe of ambulatory surgery encounter abstracts for that State, including records from both hospital-affiliated and freestanding surgery centers. Composition and completeness of data files may vary from State to State. For more information, visit the HCUP User Support Website at http://www.hcup-us.ahrq.gov or contact the HCUP Central Distributor (see below).

State Emergency Department Databases (SEDD) include discharge information on all emergency department visits that do not result in an admission. Information on patients initially seen in the emergency room and then admitted to the hospital is included in the State Inpatient Databases (SID). The SEDD contain emergency department encounter abstracts from hospital-affiliated emergency department sites. Composition and completeness of data files may vary from State to State. For more information, visit the HCUP User Support Website at http://www.hcup-us.ahrq.gov or contact the HCUP Central Distributor (see below).

Kids' Inpatient Database (KID) is a unique database of hospital pediatric inpatient stays. The 1997, 2000 and 2003 KID were specifically designed to permit researchers to study a broad range of conditions and procedures related to child health issues. The KID is created and released every three years. For more information, visit the HCUP User Support Website at http://www.hcup-us.ahrq.gov or contact the HCUP Central Distributor (see below).

HCUP CENTRAL DISTRIBUTOR

HCUP databases are available for purchase through the AHRQ-sponsored HCUP Central Distributor. All years of the NIS and KID are released through the HCUP Central Distributor. In addition, many of the HCUP State Partners allow the public release of the HCUP State Inpatient Databases (SID), State Ambulatory Surgery Databases (SASD), and the State Emergency Department Databases (SEDD)

through the HCUP Central Distributor. Application Kits for purchasing the HCUP databases are available online at http://www.hcup-us.ahrq.gov or contact the HCUP Central Distributor directly. Information on how to obtain uniformly-formatted HCUP files from States not participating in the HCUP Central Distributor is also available from the HCUP Central Distributor:

HCUP Central Distributor
Phone: (866) 556-4287 (toll-free)
FAX: (866) 792-5313
E-mail: HCUPdistributor@ahrq.gov

HCUP USER SUPPORT

HCUP User Support (HCUP-US) provides technical assistance to all HCUP users and is designed to facilitate the use of HCUP data, software tools, and products. The goals of this service are to increase awareness of the strengths and uses of HCUP data and to enhance the skills of individuals using the data for research, education, and policy analysis. A user-friendly Website for HCUP-US is located at http://www.hcup-us.ahrq.gov. This site includes links to information on how to purchase and understand the HCUP databases, as well as links to HCUP User Support Services and Frequently Asked Questions. For further information, consultants are available via both telephone and E-mail to help in planning analytic research and to offer advice about appropriate uses of HCUP data.

HCUPnet

HCUPnet is a Web-based query tool for identifying, tracking, analyzing, and comparing statistics on hospitals at the national, regional, and state level. With HCUPnet you have easy access to national statistics and trends and selected state statistics about hospital stays. HCUPnet guides you step-by-step to obtain the statistics you need. HCUPnet generates statistics using the Nationwide Inpatient Sample (NIS), the Kids' Inpatient Database (KID), and the State Inpatient Databases (SID) for those states that have agreed to participate. In addition, HCUPnet provides Quick Statistics – ready-to-use tables on commonly requested information – and national statistics based on the AHRQ Quality Indicators. HCUPnet can be found at: http://hcup.ahrq.gov/HCUPnet.asp.

TOOLS

AHRQ Quality Indicators (QIs) are clinical performance measures for use with readily available inpatient data. Methods and software for the AHRQ Quality Indicators can be downloaded from http://www.qualityindicators.ahrq.gov.

Comorbidity Software assigns variables that identify comorbidities in hospital discharge records using ICD-9-CM diagnosis codes. Methods and software can be downloaded from the HCUP User Support Website, Tools and Software page, at http://www.hcup-us.ahrq.gov/tools_software.jsp.

Clinical Classifications Software (CCS), formerly known as the Clinical Classifications for Health Policy Research (CCHPRs), are classification systems that group diagnoses and procedures into a limited number of clinically meaningful categories. Software is available that works with ICD-9-CM, ICD-10, and CPT codes. Methods and software can be downloaded from the HCUP User Support Website, Tools and Software page, at http://www.hcup-us.ahrq.gov/tools_software.jsp.

Mental Health and Substance Abuse Clinical Classifications Software (CCS-MHSA) defines variables that identify general categories for mental health and substance abuse-related ICD-9-CM diagnoses in hospital discharge records. The CCS-MHSA can be used in conjunction with the CCS or

can be used alone. Methods and software can be downloaded from the HCUP User Support Website, Tools and Software page, at http://www.hcup-us.ahrq.gov/tools_software.jsp.

Chronic Conditions Indicator (CCI) provides users an easy way to categorize ICD-9-CM diagnosis codes into one of two categories: chronic or not chronic. The tool can also assign ICD-9-CM diagnosis codes into 1 of 18 body systems. Methods and software can be downloaded from the HCUP User Support Website, Tools and Software page, at http://www.hcup-us.ahrq.gov/tools_software.jsp.

Procedure Classes identify whether a procedure is (a) diagnostic or therapeutic, and (b) minor or major in terms of invasiveness and/or resource use. Software can be found at http://www.hcup-us.ahrq.gov/tools_software.jsp.

Cost-to-Charge (CTC) Files enable the conversion of total charge to actual cost. Total charge information represents the amount that hospitals billed for services, but does not reflect how much hospital services actually cost or the specific amounts that hospitals received in payment. The CTC files allow the user to see how hospital charges translate into actual costs. This product is currently available for the NIS and SID and is planned for release for the KID in 2006. Methods and software can be downloaded from the HCUP User Support Website, Tools and Software page, at http://www.hcup-us.ahrq.gov/tools_software.jsp.

PUBLICATIONS

HCUP Research Notes and Fact Books report aggregate statistics and detailed analyses using HCUP data. To request copies, contact the AHRQ Publications Clearinghouse at (800) 358-9295 or send a postcard to: AHRQ Publications Clearinghouse, P.O. Box 8547, Silver Spring, MD 20907 or visit http://www.hcup-us.ahrq.gov/reports.jsp.

DATA USE AGREEMENT FOR THE KIDS' INPATIENT DATABASE

Please obtain the current KID Data Use Agreement from the HCUP User Support Website: http://www.hcup-us.ahrq.gov/team/KIDDUA.jsp.